

Sheet 4 of 38, Demolition Plan

23. This plan should include notes referring to fill requirements and other applicable provisions of the project geotechnical report.
24. A plan, details and specifications for the preload area should be provided.
25. A demolition-phase erosion control plan should be included in the plan set, showing required erosion control measures as stated in Note 3 on this plan.
26. Site access locations for demolition operations should be shown on the plan.
27. Note 4 states that "site cleanup and demolition must be limited to the parcel owned by HRC..." The plan should include appropriate easements relating to any work outside the site boundaries, specifically any work in the Railroad ROW (as shown on the Grading Plans, Sheets 7 and 8 of 38), and removal of the existing building that straddles the property line at the northeast corner of the site.
28. The existing railroad tracks abutting the site should be shown on the plan.

Sheet 6 of 38, Grading & Drainage Plan – Sheet 2

29. Grading at the proposed curb line along the south side of Depot Street does not show the 6" curb reveal.
30. Guardrail should be provided at the paved apron on the west side of the pump station generator building adjacent to the riverbank slope.
31. Note 7 refers to the Geotechnical Report by Oak Engineers dated February 27, 2007. The plan set and contract documents should clearly specify the contractor's responsibility to complete construction in accordance with the Geotechnical Report, as determined appropriate by NCS.
32. The riverbank restoration slope appears to be in the range of 1.7H:1V to 2H:1V. These slopes are proposed to be stabilized with erosion control blanket and plantings. The geotechnical report, page 14 (Fill and Backfill section) states that permanent slopes steeper than 2H:1V should be stabilized with riprap, and that river banks should not exceed 2H:1V. The applicant should submit slope stability calculations for the proposed riverbank slopes.
33. Proposed storm drains are located within 4 to 8 feet of units 17, 18 and 19, with the proposed storm drain approximately 9 feet below proposed finish floor. There appear to be similar proposed conditions at other locations within the development. NCS should confirm that proposed pipe materials are suitable for installation at locations close to foundations where the proposed pipe may be located within the soil support zone below the proposed building foundations. Future storm drain maintenance implications should also be considered.

Sheet 7 of 38, Grading & Drainage Plan – Sheet 3

34. The plan should include a note referring to the Depot Street Improvement Project, as on Sheet 6.

Sheet 8 of 38, Grading & Drainage Plan – Sheet 4

35. The plan shows a stabilized area (loam & seed over gravel) to access the DETENTION/FILTER system for maintenance. The Landscape Plan (L1) shows two proposed trees that appear to be within the access area. The access area should be kept clear of landscaping and other obstructions.
36. The proposed 30-inch storm drain to the StormTech detention/filter system (pipe P-2) appears to be +/- 5 feet off the building foundation and below the level of the footing, based on the floor elevations noted. NSC should confirm suitability of proposed pipe materials for proposed installation near building foundations and below the footing bearing zone (similar to comment #33).
37. The bioretention cell behind unit #66 appears to be located within several feet of the proposed storm drain to the detention/filter system, with a bottom of underdrain elevation near the top of the proposed storm drain.

The design should be reviewed to provide adequate separation between the bioretention cell and the storm drain.

38. This office recommends placement of cleanout risers at the ends of all underdrain pipe runs for the bioretention cells.

Sheet 11 of 38, Site Plan – Sheet 2

39. The barrier-free ramp at the northwest corner of the Sweetflag Drive/Lupine Lane intersection should be revised to align with the proposed crosswalk.

Utility Plans, General Comments

40. We assume that NCS will coordinate electrical service and other wire utility locations with CMP and other utility companies and will show the approved locations on the final plans.
41. Underground utility services to the proposed buildings should be shown on the final construction drawings.
42. The plans show several locations with proposed water lines and water valves located less than 5 feet away from proposed storm drain pipes and catch basin structures. We assume that NCS will coordinate with PWD to conform to their minimum pipe separation standards and all other PWD requirements.
43. Gorrill-Palmer assumes that NCS will coordinate with the Windham Fire Department for approval of hydrant locations and sufficiency of proposed fire flows within the development.
44. Utility Plan sheets 3 and 4 should include notes necessary to coordinate sitework and utility construction with proposed reconstruction of the existing 36-inch storm drain pipe across the site from Depot Street to the river. We understand that the storm drain reconstruction plans are being prepared under separate contract to the Town and that NCS is coordinating sitework design with the storm drain design by others.

Sheet 16 of 38, Utility Plan – Sheet 2

45. There appears to be an existing utility pole located within the proposed barrier-free ramp at the southeast corner of Depot Street & Trillium Drive. NCS should confirm that minimum required accessible route clearances are provided in accordance with ADA (Americans with Disability Act) Standards.

Road, Sewer and Water Profiles – General Comments

46. The profiles appear to show 5.5 feet of cover on water lines and less than 1 foot of vertical separation from sewer lines at several locations. We assume that NCS will coordinate with PWD to meet their minimum pipe separation requirements.

Sheet 23 of 38, Erosion and Sedimentation Control Plan – Sheet 1

47. As noted in comment #25, a demolition phase erosion control plan should be included in the construction plan set. That plan, or a supplemental plan for the initial site grading and fill phase, should delineate the preload area and any necessary erosion control measures and should include necessary Best Management Practices (BMPs) to control sedimentation after demolition before the site is stabilized (such as stone check dams, sediment traps, sedimentation basins, etc.).
48. This plan shows silt fence across proposed storm drain outlets. Silt fence is not appropriate for sediment control at concentrated flow points; other BMPs should be specified for such locations.
49. The erosion control plans should refer to the riverbank stabilization details on Sheet 26 of the plan set.
50. Slope stabilization requirements should be shown or noted on the erosion control plans.
51. The location of the construction fence should be coordinated with the grading plan in the area of the grading easement at the railroad ROW.

Sheet 24 of 38, Erosion and Sedimentation Control Notes

52. In general, the notes should be revised as necessary to incorporate provisions of the Erosion and Sedimentation Control narrative (Section 11) that apply to the construction phase. Some of the requirements stated in Section 11 do not appear to be included or appear to contradict the plan notes. These include stormwater diversion, dust control, slope stability and problem areas (Section 2.0); temporary non-structural measures (Section 3.0); permanent seed mixture (Section 4.0); and maintenance (Section 5.0).

Sheet 25 of 38, Erosion and Sedimentation Control Details

53. Additional erosion control details may be necessary to address the demolition and initial site grading phases of the project, such as stone check dam, sediment trap and sedimentation basin.

Sheet 26 of 38, Erosion and Sedimentation Control Details

54. The riverbank restoration plan view and profile should include notes that require construction in accordance with the project geotechnical recommendations.

55. Design calculations for the proposed riprap installation at the base of the slope should be provided. Calculations should address applicable requirements from the geotechnical report as well as riverbank protection requirements for a specific design flood.

Sheet 27 of 38, Underground Detention Details – Sheet 1

56. NCS should confirm the following design details for the detention/filter system with the StormTech manufacturer's representative:

- ◆ The filter cross section shows the StormTech chambers wrapped in woven geotextile. Is this required for all rows of the proposed system?
- ◆ The detention/filter system layout does not appear to direct stormwater flows to a single isolator row as typically recommended by the manufacturer.
- ◆ We recommend that NCS confirm the size and specifications for the crushed stone material surrounding the chambers.
- ◆ We recommend that NCS consider placement of geotextile material to separate the crushed stone chamber bedding and soil filter layers.
- ◆ It appears that additional cleanout/inspection ports are needed.
- ◆ The impermeable liner should be shown on the filter cross section.

Sheet 29 of 38, Drainage & Construction Details

57. The typical pipe section should note the type of pipe.

58. The precast concrete catch basin detail notes an RCP outlet pipe with a catch basin hood. Is RCP pipe proposed only for catch basin connections? If so, a detail for adapting to other types of storm drain pipe should be included.

59. Are catch basin hoods proposed for all catch basins?

60. A bioretention cell cleanout detail should be provided.

Sheet 33 of 38, Construction Details

61. A detectable warning strip conforming to ADA requirements should be added to the handicap ramp detail.

62. A typical section for Depot Street reconstruction should be provided.

Sheet 34 of 38 (S1), Proposed Retaining Wall Plan, Section, Elevations

63. Slope grading shown on the partial site plan does not appear to agree with the grading plan (Sheet 6 of 38). The partial site plan shows a top of slope elevation 112 and 2H:1V slopes, compared to the grading plan which shows top of slope elevation 114 and approximately 1.7H:1V slopes, respectively. The plans should be revised accordingly.
64. The extent of riprap shown on the elevation view does not appear to match the riprap detail shown on the riverbank protection detail (sheet 26 of 38). These two plans should be coordinated and revised accordingly.

Sheet 38 of 38, Plan & Profile – Depot Street

65. The plan view should show all proposed construction, including pavement sawcut locations, new pavement, limits of construction, proposed grades, fill slopes, etc.
66. A note referring to the proposed site construction plans and requiring the contractor to coordinate construction with onsite work should be added to the plan.
67. The plan should note that any existing ROW monuments or other survey markers disturbed by construction shall be reset by a Maine-licensed Land Surveyor in accordance with Town Standards.
68. Any required alteration of existing catch basins, sanitary manholes, fire hydrants or other utility structures should be noted on the plans.
69. The plan appears to show proposed sewer replacement extending south on a side street from manhole SMH-5. Limits of construction should be shown on the plan, or plans should be provided for construction extending beyond the limits of this plan sheet, if applicable.

Traffic Review

Gorrill-Palmer reviewed the traffic study prepared by Bill Bray and dated March 2007. We also completed a site visit on June 2, 2007. The study was completed in accordance with current industry standard practice. We present the following comments for the applicant's consideration and response as appropriate:

1. We concur with the trip generation, traffic volume adjustments, and crash analysis. We would question the full occupancy date of 2009, but given the 1% annual adjustment to the background volumes, we would not expect that a study horizon several years later would affect the conclusions of the study.
2. The capacity analysis showed only one movement below level of service "D" out of the several intersections that were studied. This was the Chute Road westbound thru-left turn movement at River Road. The volumes indicate only 3 right turns out of Chute Road, which would not justify a separate turn lane. The volumes exiting Chute Road would not likely satisfy a signal warrant; therefore, the lower level of service is acceptable.
3. The study did not address the potential need for a left turn lane on River Road at Depot Street. Since the proposed project sends the majority of the site-generated traffic through this intersection, we suggest that a left turn warrant evaluation be provided.
4. The MaineDOT crash summary report should be provided for our review.
5. The traffic study discusses only two driveways in the sight distance analysis. The plans show three driveways and an emergency vehicle access. The Depot Street Plan & Profile (Sheet 38 of 38) indicates that Depot Street will be reconstructed in the vicinity of Trillium Lane to achieve a minimum 250 feet of sight distance. Based on our field review and this plan, sight distances appear to be adequate. However, the applicant should clarify the driveway situation and provide their own assessment of the sight distances.

Mr. Brooks More
July 5, 2007
Page 8 of 8

Closing

Our office is available to review any revisions to the plans to address the items noted above. Please contact this office with any questions.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.

Lawrence R. Bastian, P.E.
Senior Engineer

Enc.

Copy: Lee Allen, Northeast Civil Solutions, Inc.
Steve Etzel, HRC

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VIL_RESP01846



Geotechnical
Environmental
Water Resources
Ecological

April 28, 2010
Project No. 101220

Ms. Kimberly N. Tisa
United States Environmental Protection Agency
1 Congress Street, Suite 1100 - CPT
Boston, MA 02114-2023

Dear Ms. Tisa:

**Re: Proposed Modifications to Self-Implementing PCB Cleanup Plan
Keddy Mill PCB Cleanup
Windham, Maine**

As you are aware, a Self-Implementing PCB cleanup plan was submitted to the United States Environmental Protection Agency (EPA) by Village at Little Falls, LLC (VLF) on April 28, 2006 and was approved on June 20, 2006. The plan included three phases of work: removal of PCB-containing soil and debris from building floors; assessment and remediation of PCB-impacted concrete; and assessment and remediation of exterior PCB-impacted soils. Phase I of this plan, removal of PCB-containing soil and debris from building floors, was to have been implemented during the late summer and fall of 2006.

Proposed site redevelopment originally included demolition of the former mill building. However, during the engineering design phase of the redevelopment, building demolition was complicated by the presence of retaining structures abutting the Presumpscot River. As a result, site work was put on hold and the development was redesigned including structural assessment, architectural design and planning with the Town of Windham. Given the uncertainty surrounding the future development of the site and initiatives to secure funding for PCB characterization and cleanup, the PCB cleanup was delayed.

The Town of Windham received an EPA Brownfields Assessment grant in 2009 and had targeted the Keddy Mill for PCB assessment activity. In response to questions raised about the nature and scope of site assessment and cleanup work, Frank Gardner with EPA Region 1 visited the site during the week of April 5, 2010. Following this visit, Mr. Gardner raised concerns about trespassers on the property and requested acceleration of Phase I of the PCB cleanup plan.

GEI Consultants is proposing two modifications to the Phase I PCB cleanup plan approved by EPA (attached hereto) to enhance risk mitigation. The modifications include:

1. Temporarily capping exposed soils inside the mill building which may contain PCBs. Soils are exposed where concrete is missing due to decay or removal for site operations. Exposed soils potentially containing PCBs will be covered with polyethylene and depressions filled with pea stone to match the surrounding floor grade.

VIL_RESP01847

April 28, 2010

2. Capping the ends of oil-filled fuel supply piping found to contain PCBs. Heavy fuel oil from the pipes was observed to have leaked onto walls and floors in some building areas. Removal of the piping will be undertaken as a future phase of cleanup which is anticipated to address PCB-impacted concrete and may occur in concert with building demolition.

We are submitting this request for plan modification in accordance with condition 14 of the EPA Approval letter dated June 20, 2006. This condition requires notification of any modifications to EPA "no less than 14 calendar days prior to the proposed implementation of the change."

Thank you for your consideration of this plan modification request. If you have any questions, please do not hesitate to contact the undersigned.

Sincerely,

GEI CONSULTANTS, INC.



D. Todd Coffin, C.G., P.G.
Senior Project Manager

DTC/bdp

Attachment: Phase I PCB Cleanup Plan

cc: **Steve Etzel, Hudson Realty Capital**
Frank Gardner, EPA Region 1
Laura Gay, Maine DEP

Y:\PROJECTS\2010\101220 Keddy Mill\tisa 042810.docx

VIL_RESP01848

**PLAN FOR
SELF-IMPLEMENTING CLEANUP OF
PCB REMEDIATION WASTE – PHASE I
7 DEPOT STREET
SOUTH WINDHAM, MAINE**

Prepared for:

**Renee Lewis
Village at Little Falls, LLC
2 Market Street, 6th Floor
Portland, Maine 04101**

Prepared by:

**Ransom Environmental Consultants, Inc.
400 Commercial Street, Suite 404
Portland, Maine 04101
(207) 772-2891**

**Project No. 046016
April 28, 2006**

**D. Todd Coffin
Maine Certified Geologist No. 310**

VIL_RESP01849

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Figure 2: Site Plan: Ground Level
Figure 3: Site Plan: First and Second Floors

APPENDICES

Appendix A: Certification
Appendix B: Laboratory Data Sheets
Appendix C: Notification to MDEP and Town of Windham

1.0 INTRODUCTION

On behalf of Village at Little Falls, LLC, Ransom Environmental Consultants, Inc. (Ransom) has prepared this notification for self-implementation of Polychlorinated Biphenyl (PCB) Remediation Waste identified at the former Keddy Mill, located at 7 Depot Street in South Windham, Maine (the Site). PCB Remediation Waste has been identified both inside the Site Building and at the exterior of the Site. Ms. Renee Lewis, representative of Village at Little Falls, LLC, is authorized to signed the certification statement required by §761.61(a)(3)(E). Her contact information is:

Ms. Renee Lewis
2 Market Street, 6th Floor
Portland, Maine 04101

(207) 772-7219

The certification statement is attached as Appendix A. A Site Location Map is attached as Figure 1.

Based on the characterization activities performed at the Site, Ransom determined that interior building surfaces and soils beneath and exterior to the building are PCB-contaminated. The source of the PCBs identified at portions of the interior of the Site Building originated from:

1. Release(s) of PCB-mineral oil dielectric fluid (PCB-MODF) from electrical equipment located within the mill building;
2. Tracking of PCB-MODF onto surfaces in parts of the Site Building where PCB-MODF oil spills had not necessarily occurred; and
3. PCB-contaminated fuel oil that remains in distribution piping inside the mill building, and in some areas has leaked onto floors and walls from this piping.

PCB-contaminated soils were identified in three areas:

1. In, and adjacent to, a sump located in the basement of the former Melt Building;
2. On the ground floor of the Melt Building where broken concrete flooring has exposed sub-grade soils; and
3. On the ground floor of the Storage and Manufacturing portion of the building where broken concrete flooring has exposed sub-grade soils.

Village at Little Falls, LLC intends to remediate PCB-contaminated concrete floors and walls such that PCB concentrations remaining in concrete and other porous materials are reduced to 1 milligram/kilogram (mg/kg) or less. PCB-contaminated soil beneath and exterior to the Site building will be remediated in accordance with 40 CFR 761.61, and appropriate classification of "Low Occupancy" or "High Occupancy" areas.

PCB clean-up at the Site will be undertaken in three phases, each in accordance with the (United States Environmental Protection Agency's (EPA's) self-implementing procedure under §761.61(a):

Phase I – Building Interior Sludge, Dirt/debris and Oily Materials

The initial phase of PCB mitigation involves clean-up of sludge, dirt/debris and oily materials that have accumulated on floors and walls inside the former mill building. This plan addresses cleanup of sludge, dirt/debris, and oily materials containing PCBs inside the building.

Phase II – Building Interior Porous Surfaces

Following removal of the interior sludge, dirt/debris and oily materials, sampling and testing of porous concrete and wood surfaces will be undertaken to determine additional mitigation requirements. Many of these surfaces are covered with a layer of sludge, dirt/debris or oily materials, thus it is proposed that the sludge, dirt/debris and oily materials are removed and properly disposed prior to sampling of the underlying porous surface. This approach will allow improved visual identification of stained surfaces and permit more representative sampling of the porous material for PCB impacts. A separate plan will be presented that details the supplemental testing and methodology for mitigation of interior porous surfaces.

Phase III – Soils

Preliminary testing has identified PCBs in soils both exterior to and beneath the site building. Due to restricted access, additional sampling and testing of soils will be undertaken following partial demolition of the Site Building. A separate plan will be presented that details the supplemental testing and methodology for mitigation of site soils.

The remediation work proposed in this Plan is being undertaken by Village at Little Falls, LLC in order to initiate Site redevelopment activities which include demolition of the former mill building. To facilitate the remediation of this facility, Ransom and Village at Little Falls, LLC respectfully request that this Plan be reviewed and approved by the EPA by May 28, 2006 (30 days from submittal).

The Maine Department of Environmental Protection (MEDEP) has reviewed and approved a Voluntary Response Action Plan (VRAP) dated June 8, 2005, and has issued a "No Action Assurance Letter" to Village at Little Falls, LLC and Lumas, Inc. (site owner). The VRAP details the Site background, Site investigation findings and the proposed mitigation plan. MEDEP will issue a "Certificate of Closure" following completion of Site mitigation and review of associated documentation.

2.0 BACKGROUND

2.1 Site Description

The Site consists of a former steel mill located on 7 Depot Road in South Windham, Maine (refer to Figure 1). The approximately 6.5 parcel is bordered by Depot Street acre to the North, Maine Central Railroad tracks to the east, the Presumpscot River to the South and Route 202 to the West. The site was reportedly first developed for industrial use in the 1700s, and over the years uses included a saw mill, grist mill, manufactured wood board mill and the steel mill whose remnants presently occupy the site.

The site is presently occupied by a former mill building constructed primarily of concrete and brick. The majority of the building consists of two levels, including a ground floor/basement that is partially below grade. Structures were added to the building over the years, and historic site plans denote the following uses: boiler house, generator room, press building, melt building, storage and manufacturing, and offices. The forge shop and boiler house have been razed.

2.2 Summary of Previous Investigation Activities

The property has been the focus of several environmental investigations since 1995. The investigation reports reviewed by Ransom include the following:

1. Phase I Limited Environmental Assessment, Lot 7 of Map 38, Windham Township, South Windham, Cumberland County, Maine, by Consla Geotechnical Engineering, March 18, 1993.
2. Environmental Site Assessment, Phase I & II, Former Steel Mill Property, Route 202 and Depot Street, Windham, Maine, by S.W. Cole Engineering, Inc., November 17, 1997.
3. Report on Supplemental Site Investigation, 7 Depot Street, Windham, Maine by Jacques Whitford Company, Inc., March 9, 2004.

The Phase I Limited Environmental Assessment by Consla Geotechnical Engineering identified potential sources of environmental impacts but included no subsurface investigation or chemical testing of soils, sludge or other materials at the Site. The assessment identified numerous tanks, chemical storage containers and operations areas that had the potential to impact the site environment.

Subsurface investigations by S. W. Cole in 1995 and 1996 included completion of twenty-four test pits targeting former storage tanks and other areas of potential concern. Soil samples were screened for volatile organic compounds (VOCs) with a photoionization detector (PID) and six soil samples were tested in a laboratory either for fuel oil, pesticides, PCBs, or heavy metals.

S. W. Cole identified heavy oil-impacted soil at the northern end of the site near Depot Street. The impacted soil was located in the vicinity of a two former above-ground heavy oil storage tanks (now removed). S. W. Cole removed approximately 11 tons of soil impacted by the heavy oil under the oversight of the MEDEP. S. W. Cole identified no significant impacts from pesticides, PCBs or heavy metals during their Site investigation.

In August, 2003, Jacques Whitford completed supplemental investigations including twelve test pits, six hand augers and twenty-three surface soil samples at the 7 Depot Street site to evaluate areas of potential concern identified during previous site investigations. These areas included:

- Two former above ground fuel storage tanks (15,000 and 10,000 gallon capacity) near the railroad tracks on the east side of the site where oil-stained soils were observed during a previous site investigation;
- Two 1,000 gallon underground wastewater tanks adjacent to the north wall of the facility;
- Former 3,000 gallon above-ground fuel tank located at the end of a rail spur on the east side of the site;
- Transformer pad/electrical substation on the south side of the site;
- Former drum storage area at the south end of the former mill building;
- Former garage at the south end of the site; and
- A sump and area of broken concrete in the basement of the former Melt Building.

Selected soil samples were tested for VOCs (EPA Method 8260-B), diesel-range organics (DRO), the eight RCRA metals, and PCBs. Sampling by Jacques Whitford also included testing of sludge and dirt/debris from floor surfaces inside the mill building for PCBs. The interior PCB sample locations Sampled by Jacques Whitford are shown on Figures 2 and 3, and included:

Sample ID	Location/Rationale
SS5	Material from area of broken concrete in Melt Building Basement
SS6	Material from floor sump in Melt Building Basement
SS7	Sludge on concrete floor in maintenance shop, first floor
SS8/SS9	Sludge on concrete floor in maintenance shop, first floor
SS10	Sludge on concrete floor near former transformer, first floor
SS101A/B	Material from floor sump in Melt Building Basement
SS102	Dirt/debris pile on concrete floor in Melt Building Basement
SS103	Dirt/debris pile on concrete floor in Melt Building Basement
SS104	Dirt/debris pile on concrete floor in Melt Building Basement

Jacques Whitford collected sample SS5 from an area of broken concrete in the basement of the former Melt Building. Samples SS6 and SS101 were collected from a floor sump along the south wall in the Melt Building. The sump was about 1.5 ft x 1.5 ft square and contained water at a depth of about 2 ft below the floor level. Hand excavation along the building wall did not identify a discharge pipe from the drain. Jacques Whitford indicated that the drain may have an open bottom or sides under the building floor, with no point discharge.

Samples SS7, SS8/SS9 (co-located samples), SS10, SS102, SS103, and SS104 were composed of sludge that had accumulated on the building's concrete floor. Sample locations were selected based on proximity to oil stains, maintenance activities and former electrical equipment, such as transformers.

Total PCBs concentrations of 174 ppm (Aroclor 1254 and Aroclor 1260) were detected in material collected from the floor sump located along the south wall of the building basement/ground floor (SS6). Confirmatory sampling from this location indicated 262 ppm PCBs (SS101A) and 570 ppm PCBs (SS101B – split sample). The area of broken concrete (SS5) contained 77 mg/kg total PCBs.

Material sampled from the surface of the concrete floor inside the building contained total PCBs ranging from 11 ppm in the maintenance shop (SS8) to 138 ppm on the ground floor of the Melt Building (SS103). The PCBs detected included Aroclor 1254 and 1260.

2.3 Surrounding Receptors

Public water is available to the site area. However, Portland Water District records for South Windham indicate that a number of residences generally east of the site have private water supply wells. The closest wells to the site include the Boulanger, Georgatos and Reed residences, located about 500 to 1,000 feet to the northeast. Site topography indicates these residences are located at an elevation 20 to 40 feet higher than the site and are likely upgradient with respect to groundwater flow.

The Presumpscot River borders the site to the west, and properties to the north, east and south consist of a mix of commercial, industrial and residential properties. The closest residence to the site is an abutting apartment building about 300 feet east of the mill building. Ransom has identified no schools, playgrounds or day care facilities within 500 feet of the Site.

3.0 SITE CHARACTERIZATION BY RANSOM

Based on the results of the prior Site investigations, Ransom conducted additional characterization of materials inside the mill building for PCBs. The sampling program included the following:

1. Collection of surface wipe samples to assess possible tracking of PCBs into a first floor hallway and office/storage areas at the south end of the mill building.
2. Collection of bulk samples of solid material from the top of concrete floors in the basement and first floor of the Melt Building, the first floor Storage and Manufacturing area, the Press Building (ground floor) and press pit (ground floor);
3. Collection of bulk samples of oily material from the concrete floor and walls in the basement and first floor of the Melt Building, and from the first floor of the Storage and Manufacturing building;
4. Collection of sub-slab material where concrete had been broken in the vicinity of two transformers (in storage) on the first floor of the mill building; and
5. Collection of wood chips from oil-stained wood in the vicinity of electrical equipment in the basement (Generator Room) and first floor of the Melt Building.

The samples collected during Ransom's investigation were analyzed by Pace Analytical, Inc. (Pace) of Pittsburgh, PA for PCBs by U.S. EPA Method 8082. Bulk samples were extracted using US EPA Method 3540 (Soxhlet Extraction) and the wipe samples were extracted using a modified Method 3550 (sonication). The sample results are summarized on Table 1; laboratory data sheets including QA/QC reports are provided in Appendix B.

3.1 Surface Wipe Samples

Ransom collected three surface wipe samples (IW-01 through IW-03) from concrete floors in a first floor hallway and in the office/laboratory space (second floor) at the south end of the mill building on October 27, 2005. Each sample was collected in accordance with the standard wipe test as defined by §761.123. Wipe sampling locations are depicted on Figures 3 and 4.

PCBs were not detected in wipe samples IW-02 (2nd floor office area) and IW-03 (1st floor hall). Aroclor 1254 and Aroclor 1260 were detected at a total concentration of 44 µg/100 cm² in IW-01 (2nd floor stockroom).

3.2 Bulk Solids on Walls and Floors

Ransom collected ten samples of bulk solids from the top of concrete floors in the former mill building on October 27 and November 2, 2005 (refer to Figures 2 and 3). The samples included:

- Melt Building basement (IS-09 and duplicate IS-13)
- First floor of the Melt Building (IS-10, IS-11 and IS-14)
- Ground floor of the Storage and Manufacturing area (IS-06)
- First floor of the Storage and Manufacturing area (IS-01 and IS-02)
- Press Building (IS-07 and IS-08).

Total PCBs were detected at concentrations ranging from non-detect in the Press Building (IS-08) to 320 mg/kg on the first floor of the Storage and Manufacturing area (IS-02). Four of the ten samples contained total PCBs with concentrations greater than 50 mg/kg. The PCBs detected were Aroclor 1248, 1254 and 1260.

3.3 Oily Material

Ransom collected six samples of oily material associated with fuel distribution piping in the Melt Building. The piping includes fuel supply and return lines extending from the south end of the Melt Building basement to the Storage and Manufacturing area at the north end of the mill building. The oil samples appeared to consist of a heavy heating oil (No. 6/Bunker C) and included:

- Oil on the wall of the Melt Building basement, near fuel piping (IS-03)
- Oil on the concrete floor beneath a fuel pipe cutoff ((IS-04)
- Oil on the wall of a former furnace in the basement of the Melt Building (IS-15)
- Oil that had leaked from a fuel pipe fitting on the first floor of the Melt Building (IS-16)
- Oil that had leaked from a fuel piping elbow on the first floor of the Melt Building (IS-17)
- Oil that had leaked from a fitting in an apparent fuel pump on the first floor of the Storage and Manufacturing area (IS-18).

Samples IS-03 and IS-04 were collected on October 27, 2005. Samples IS-15 through IS-18 were collected on January 2, 2006. The sample the locations are shown on Figures 2 and 3.

Total PCBs in the oily materials were detected at concentrations ranging from non-detect in IS-18 to 240 mg/kg in IS-15. Two of the six samples of oil materials contained PCBs at concentrations greater than 50 mg/kg. PCB constituents included Aroclor 1242, Aroclor 1248 and Aroclor 1254.

3.4 Sub-Slab Sample

Ransom collected one bulk sub-slab sample (IS-05) of fill from an area of broken concrete flooring in the Storage and Manufacturing area on October 27, 2005. The sample location is shown on Figure 2.

The soil sample contained total PCBs at a concentration of 97 mg/kg. The constituents were Aroclor 1254 (66 mg/kg) and Aroclor 1260 (31 mg/kg).

3.5 Bulk Wood Samples

Ransom collected two samples of oil-stained wood in transformer areas, one from a platform in the former Generator Room (IWD-02), and one from a platform on the first floor of the Melt Building (IWD-01). Sample locations are shown on Figures 2 and 3.

The two wood chip samples contained total PCBs of 36.9 mg/kg (IWD-01) and 105 mg/kg (IWD-02). Aroclor 1242, 1254 and 1260 were identified.

3.6 Data Usability/Validation

To assess the usability/validity of the laboratory data obtained during the investigation work described above, Ransom conducted a limited data validation assessment. This assessment included an evaluation of the following parameters as provided in the laboratory reports:

1. Sample integrity;
2. Laboratory information;
3. Chain of custody;
4. Laboratory report details; and
5. Quality Assurance/Quality Control.

During the validation process, Ransom reviewed the laboratory analytical reports and completed a Laboratory Report Checklist documenting the performance of the validation. Ransom did not identify laboratory quality-control issues that may have had an adverse impact on the usability of the data.

3.7 Determination of PCB Remediation Waste

The concentration of PCBs in bulk materials sampled inside the mill building to date range from non-detect to 570 mg/kg. Fifteen of the thirty samples collected exhibited total PCB concentrations greater than 50 mg/kg. The source of PCBs at the site is likely a combination of spills and leaks of PCB-MODF from transformers and other electrical equipment, PCB-containing lubricating/hydraulic oils and PCB-contaminated fuel oil. Given uncertainty of the source, date of use and original concentration of PCBs in equipment in the mill building, sludge, dirt/debris and oily material on the floors and walls of the mill building will be presumed to be "PCB Remediation Wastes."

3.8 Quantity of PCB Remediation Waste

The quantity of PCB remediation waste has been estimated based on visual assessment of approximate material thickness and square footage of areas covered with sludge, dirt/debris and oily material. The table below summarizes the estimates.

Location	Estimated Impacted Area (sq. ft.)	Estimated Thickness (in)	Estimated Volume (cubic yards)
Maintenance Shop Area	4,200	0.5	6.5
Melt Building- ground	10,000	0.5	15
Melt Building – 1 st	10,000	0.5	15
Storage & Manufacturing – ground	6,000	0.25	4.7
Storage & Manufacturing – 1 st	6,000	0.25	4.7
Generator Room	400	0.25	0.3
Fuel piping in Melt Building and Storage/Manufacturing Area	Not Applicable	Not Applicable	10
Estimated Total (cubic yards)			56.2

Specific PCB-contaminated locations are not delineated on the site plans due to the virtual ubiquitous presence of these materials within the mill building. As a result, sludge, dirt/debris and oily materials on floors, walls and in fuel piping will be presumed contaminated with PCBs (>1 ppm) and will be removed for proper disposal at a PCB disposal facility.

4.0 CLEANUP PLAN

4.1 Objective

The objective of the cleanup activities conducted under this Plan is to remove sludge, dirt/debris and oily material from the concrete flooring and walls of the former mill building, and to remove piping that contains heavy fuel oil contaminated with PCBs. Following removal of this material, additional characterization of underlying concrete and soils will be conducted, and self-implementation plans will be submitted to EPA for subsequent mitigation. The mill building is proposed to be demolished for site redevelopment.

4.2 Cleanup Goal

It is assumed that sludge, dirt/debris, oily material and associated fuel piping contain PCB concentrations greater than 1 mg/kg. Accordingly, this material will be collected and properly disposed as PCB Remediation Waste.

4.3 Public Notification

Ransom will notify the U.S. EPA, MEDEP, and the Windham Town Manager regarding the performance of the work prior to implementation of the Plan.

4.4 Necessary Permits

Ransom has submitted a Voluntary Response Action Plan to MEDEP and has received approval for site mitigation. Ransom has identified no other permit requirements.

4.5 Sludge, dirt/debris and Oily Material Removal

Ransom will be on-site to oversee contractor removal of sludge, dirt/debris, oily material and associated piping from the mill building. Depending on the consistency of the material, PCB waste will be recovered using either a vacuum equipped with a HEPA-filter, or by shoveling into storage containers (*e.g.*, hardened sludge and oily materials). Dust suppression, such as application of a spray mist, will be implemented on an as-needed basis.

For oil-stained concrete surfaces, the contractor may apply a petroleum-based agent (*e.g.*, #2 fuel oil) to assist in removing residual PCB contamination. Applied liquids and residuals will be contained with plastic sheeting and absorbent pads.

Collected materials will be stored in labeled 55-gallon drums or roll-off containers. The containers will be kept closed except during transfer of waste to the containers. Used HEPA filters and containment materials (*i.e.*, plastic sheeting, tape, lumber) will be managed as PCB Remediation Waste. Following appropriate waste characterization activities, the PCB Remediation Waste is scheduled to be disposed at The Wayne Disposal in Belleville, Michigan.

4.6 Confirmatory Sampling and Cleanup Verification

Following the removal of the PCB-contaminated sludge, dirt/debris, oily materials and associated piping from the mill building, Ransom will conduct sampling of the underlying concrete to assess the

potential for residual PCBs. Samples will be collected in visibly stained areas and other locations where PCBs were identified during bulk sample characterization. Sampling will be conducted in accordance with EPA's "draft Standard Operating Procedure for Sampling Concrete in the Field," dated December 1, 1997. Sampling frequency will be assigned based on §761.265, "Sampling Bulk PCB Remediation Waste and Porous Surfaces." If PCBs are identified at concentrations greater than 1 mg/kg, a plan for mitigation of the concrete will be prepared and submitted to EPA.

4.7 Contingencies

The proposed PCB mitigation plan is inherently conservative in that sludge, dirt/debris and oily materials encountered within the mill building is assumed to be PCB Remediation Waste with total PCB concentrations >50 ppm. The greatest uncertainty is the volume of the material that will be collected, stored and disposed off site. Our client and the contractor are prepared to collect and properly dispose of additional PCB Remediation Waste if actual volumes exceed the estimates detailed herein.

5.0 PROPOSED IMPLEMENTATION SCHEDULE

Ransom proposes the following implementation schedule for the Plan:

Activity	Completion Date
Submittal of Plan	April 28, 2006
US. EPA Approval (expected)	May 28, 2006
Interior Building Material Removal	June-July 2006



ENVIRONMENTAL CONSULTING • CONSTRUCTION INSPECTION & MATERIALS TESTING

**SUPPLEMENTAL PHASE II
ENVIRONMENTAL SITE ASSESSMENT
13 DEPOT STREET
WINDHAM, MAINE**

Prepared for:

TOWN OF WINDHAM

8 School Road

Windham, Maine 04062

Using Funding Provided by EPA Brownfields Assessment Grant #BF96110101

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